

NAZAROV, I.N.; SHVEKHGEYMER, G.A.

Acetylene derivatives. Report No. 178. Cyanoethyl esters of  
acetylenic alcohols with aromatic substituents. Izv. AN SSSR,  
Otd.khim. nauk no.11:1378-1382 N '56. (MIRA 10:3)

1, Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk  
SSSR, (Acetylene) (Nitriles)

NAZAROV, I.B.; SHVERKHETMER, G.A.

Acetylene derivatives. Part 172. Mannich reaction with  $\beta$ -cyano-  
thyl ethers of acetylenic alcohols. Zhur.ob.khim. 26 no.3:813-819  
Ms '56. (MLRA 9:8)

1. Institut organicheskoy khimii Akademii nauk SSSR.  
(Alcohols)

SHVEKHGEYMER, G. A.

Acetylene derivatives. CLXXII. Mannich reaction with  
2-cyanoethyl ethers of acetylenic alcohols. I. N. Nazarov  
and G. A. Shvekhgelmier. *J. Gen. Chem. U.S.S.R.* 28,  
932-7(1956)(English translation).—See *C.A.* 50, 13901k.  
B. M. R.

SHVETKHGEYMER, G.A.

New methods for the synthesis of diethylaminomethyl derivatives  
of substituted propargyl alcohols. Izv. AN SSSR Otd. khim. nauk  
no.10:1265-1267 0 '57. (MIRA 11:3)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.  
(Chemistry, Organic--Synthesis) (Propynol)

62-58-4-26/52

AUTHORS: Hamurov, I. M., Shvekhgenger, G. A.

TITLE: Hydration of  $\beta$ -Ethyl Cyanide Ethers of Acetylene Alcohols. Alcoholysis of the Products of Hydration (Gidratatsiya  $\beta$ -tsianetilovykh efirov atsetilenevykh spirtov. Alkoholiz produktov gidratatsii)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1998, Nr 4, pp. 514 - 516 (USSR)

ABSTRACT: In the present paper the hydration of a number of ethyl cyanide ethers of the binary and tertiary acetylene alcohols was realized (formula I). The produced  $\beta$ -ethyl cyanide ethers as well as the  $\beta$ -ethyl cyanide ether of dimethylacetylcarbinol synthesized by the authors were subjected to the hydrolysis of the methanol solution of hydrogen chloride at room temperature. The  $\beta$ -ethyl cyanide ketoethers produced by means of the hydration of the  $\beta$ -ethyl cyanide ethers of the tertiary acetylene alcohols convert into the corresponding  $\beta$ -carbo-methoxy ethyl ethers (in a yield of from 60 - 80% - see

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12-50-4-26/32

Hydration of the  $\beta$ -Ethyl Cyanide Ethers of Acetylene Alcohols. Alcoholysis of the Products of Hydration

formula II). The alcoholysis of the  $\beta$ -ethyl cyanide keto-ethers produced from  $\beta$ -ethyl cyanide ethers of the binary acetylene alcohols is accompanied by secondary processes and the expected  $\beta$ -carbomethoxy-ethyl ethers (formula III) are produced in small yields (about 20%). There are 2 tables, and 4 references, all of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute for Organic Chemistry imeni N. D. Zelinskiy, AS USSR)

SUBMITTED: December 3, 1957

AVAILABLE: Library of Congress

1. Acetylene alcohols--Hydration

Card 2/2

SOV/79-29-2 32/7'

AUTHORS: Nazarov, I. N. (Deceased), Shvakhgayer, G. A.

TITLE: Synthesis of the Amides of  $\beta$ -Carboxyethyl Ethers of Dimethyl- $\beta$ -bromoethynyl Carbinol and 1-( $\beta$ -bromoethynyl)-cyclohexanol-1  
(Polucheniye amidov  $\beta$ -karkoksietilovykh efirov dimetil- $\beta$ -brom-  
etnilkarbinola i 1-( $\beta$ -brometnil)-tsiklogeksanola-1)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol. 29, Nr. 2, pp 457-462 (USSR)

ABSTRACT: The authors earlier cyanoethylated acetylene alcohols (Refs 1,2) and carried out further transformations of the resulting  $\beta$ -cyanoethyl ethers (Refs 3,4). In the work under review they linked some bromo substituted acetylene alcohols to acryl nitrile and effected several transformations of the resulting  $\beta$ -cyanoethyl ethers. The action of KOBr upon the acetylene alcohols (Ref 5) brought about dimethyl- $\beta$ -bromoethynyl carbinol (I), 1-( $\beta$ -bromoethynyl)-cyclohexanol-1 (II) and methylphenyl- $\beta$ -bromoethynyl carbinol (III). These alcohols easily affiliate to acryl nitrile in the presence of 40% caustic potash solution, under formation of the corresponding  $\beta$ -cyanoethyl ethers (IV) (reaction scheme 1). On the other hand, the same bromo-substituted  $\beta$ -cyanoethyl ethers (IV) were also obtained by bromination of the compounds (V-VII).

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SOV/79-29.2-22/7

Synthesis of the Amides of  $\beta$ -Carboxyethyl Ethers of Dimethyl- $\beta$ -bromoethynyl Carbinol and 1-( $\beta$ -bromoethynyl)-cyclohexanol-1

(Scheme 2) The ethers (IV), in which  $R=R'=\text{CH}_3$  and  $R=R'=(\text{CH}_2)_5$ , were transformed into the  $\beta$ -carboxyethyl ethers (VIII) by methyl alcohol saturated with HCl and subsequent hydrolysis. Ether IV, however, where  $R=\text{CH}_3$  and  $R'=\text{C}_6\text{H}_5$ , does not undergo such a transformation, as it is very sensitive to strong acids (Scheme 3). Ethers (VIII) are easily saponified into ethers (IX). Since compounds with an amide group or a halogen atom in the molecule (Ref. 6), like many acetylene alcohols (Ref. 7) are known to have a narcotic effect, the synthesized amides (XI) are pharmacologically checked. There are 7 references, 4 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences, USSR)

SUBMITTED: December 6, 1957

Card 2/2



AUTHORS: Nazarov, I. N. (Deceased). Shvekhgymov, G. A. SOV 79-29-2-23/71

TITLE: Synthesis of the Carbamates of the Tertiary Acetylene Alcohols  
(Poluchenije karbamatov tretichnykh atsetilenovykh spirtov)

PERIODICAL: Zhurnal obshchey khimii. 1959. Vol 29, No 2, pp 463-467 (USSR)

ABSTRACT: Among the acetylene alcohols and their carbamates known as having narcotic and tranquilizing properties, the tertiary acetylene alcohols and their carbamic acid esters deserve special attention. Furthermore the carbamate of 1-ethynyl cyclohexanol-1 which is also known under the name of "Valamin" (Ref 1), "Valmid" or "Ethinamate" (Ref 2). The synthesis of esters from carbamic acid and tertiary acetylene alcohols, however, is confronted by great difficulties. The attempts made by the authors to synthesize the carbamate of dimethyl ethynyl carbinol by reacting with urea, nitric acid urea, as well as with phosgene and ammonia, were unsuccessful. Nor could the N-phenyl carbamate of the same carbinol with phenyl isocyanate be obtained. The uretanes of tert acetylene alcohols were obtained according to Lester (Ref 3) by the action of phosgene upon the alcoholate or the O-MgBr derivative of alcohol, with subsequent treatment of the reaction prod-

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SOV/79-29-2-23/71

Synthesis of the Carbamates of the Tertiary Acetylene Alcohols

ucts with ammonia (Scheme 1). Compounds (I) were not separated but directly treated with ammonia. The yield in urethane (II) was smaller (Scheme 2). On using primary and secondary amines instead of ammonia it was possible to synthesize the N-substituted urethanes of dimethyl ethynyl carbinol (Scheme 3). There are 10 references, 1 of which is Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk SSSR (Institute of Organic Chemistry of the Academy of Sciences, USSR)

SUBMITTED: December 6, 1957

Card 2/2

5(3)

## AUTHORS:

Shvekheym, J. A., Pyatakov, L. F., SOV/74-26-4-b/6  
Novikov, S. S. (Moscow)

## TITLE:

Synthesis and Reactions of Aliphatic Nitroalcohols  
(Sintez i reaktsii alifaticheskikh nitrospirtov)

## PERIODICAL:

Uspekhi khimii, 1959, Vol 28, Nr 4, pp 484-516 (USSR)

## ABSTRACT:

In this paper an attempt is made to summarize the data on the chemistry of nitroalcohols published in the technical literature. To begin with the author reports on the preparation methods of nitroalcohols. The method most thoroughly investigated and most frequently used is the condensation of carbonyl compounds with nitroparaffins (Refs 1 - 39, 41, 42, 50). Moreover, nitroalcohols can be obtained by the reaction of silver nitrite with halide hydrides (Refs 24, 43 - 45), by the effect of nitrogen oxides (Refs 46 - 60) and  $\text{HNO}_3$  (Refs 46, 44) on olefins, and from  $\alpha$ -oxides (Refs 61 - 65). Nitroalcohols could be obtained only in two cases in the nitration of alcohols (Refs 66, 67), otherwise, nitroalkanes are formed as main reaction products. A number of nitroalcohols were synthesized

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Synthesis and Reactions of Aliphatic Nitroalcohols

SOV/74-28-4-6/6

by the selective reduction of the nitrocarbonyl compounds and the esters of nitric acids (Refs 68, 69). Halide-nitroalcohols containing the halide at the carbon atom connected with the nitro group can be reduced up to nitroalcohols in the presence of palladium and pyridine attached to barium sulphate (Refs 70, 71, 73). A great number of 2-nitropropanediols-1,3 substituted by the p-nitrophenyl (Ref 73) or arylazo group (Ref 74) were synthesized in an acid medium by the decomposition of the dioxants obtained from aldehydes or ketones and corresponding 2-nitropropanediols-1,3. The effect of alkaline agents on triols and diols is also worth mentioning (Refs 70, 75). In the second part of this survey the author deals with the reactions of nitroalcohols. Numerous papers are devoted to the methods of esterification of nitroalcohols (Refs 39, 40, 68, 76 - 116). Moreover, the preparation of acetals and ketals (Refs 83, 117 - 121), the reaction with ammonia and amines (Refs 122 - 133), the reaction with amines and formaldehydes (Refs 134 - 136), the oxidation of the hydroxyl group into the carbonyl group (Refs 137 - 140), and the substitution of hydroxyl by a

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Synthesis and Reactions of Aliphatic Nitroalcohols

SOV/74-28-4-6/6

chlorine atom (Refs 18, 22 - 24, 102, 108, 141, 142) are described. Duden and Ponnendorf discovered a spontaneous dehydration of nitroalcohols (Ref 37) which was later on confirmed and investigated by other authors (Refs 15, 138, 143 - 163). So far ether could not directly be obtained from nitroalcohols. But there are some indirect methods which were described in the papers 159 and 164 - 169. K- and Na-salts of nitroalcohols are formed already during the synthesis of nitroalcohols (Ref 41), moreover, with the decomposition of glucoles by the effect of alkali metal-alcoholates (Refs 70, 75, 130). Finally, they can be obtained by the effect of alcoholates of alkali metals or caustic lye on nitroalcohols (Refs 71, 172 - 175). There are no data in publications on the preparation of C-halogen derivatives of nitroalcohols by a direct substitution of the hydrogen atoms at the carbon atoms by halogen. In all cases the effect of the corresponding halogen on the sodium or potassium salt of nitroalcohol is used instead (Refs 70, 75, 139, 171, 173, 176, 177). Moreover, the reactions with aromatic aldehydes (Ref 178), the decomposition of 2-nitro-2-methylolpropanediol-1,3,

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## Synthesis and Reactions of Aliphatic Nitroalcohols

SOV/74-28-4-6/6

nitroglycols and nitroalcohols (Refs 37, 40, 70, 72, 75, 130, 171, 177, 179), the effect of phenyl diazonium chloride (Refs 175, 176) and the reduction of nitroalcohols (Refs 31, 58, 70, 123, 166, 180 - 190) are described. In conclusion, 3 reactions are mentioned: 1) The synthesis of 3,5-dinitrooctane by the interaction of nitrobutane with 2-nitrobutanol-1 in the presence of  $(C_2H_5)_2NH$  in  $CHCl_3$  and after removal of water (Ref 191). 2) Only one case is known of C-alkylation of nitroalcohols. In 1924, 2-nitro-2-chloropropanol was synthesized by the reaction  $CH_3I$  with the Na-salt of 2-nitro-2-chloroethanol in boiling methanol (Ref 148). 3) It was shown in reference 192 that the K-salt of dinitroethanol combines with acrylate and esters of the  $\alpha, \beta$ -dinitro- $\delta$ -oxyvalerianic acid are formed. The enclosed table shows the properties of some aliphatic nitroalcohols. There are 1 table and 309 references, 7 of which are Soviet.

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5(1)

SOV/80-32-5-50/52

AUTHORS: Nazarov, I.N. Shvekhgheymer, G.A.

TITLE: The Production of Propionic Acid From Acrylonitrile

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1177-1178 (USSR)

ABSTRACT: The demand for propionic acid has increased recently, because of it being used in the production of anesthetizing preparations. Propionic acid is prepared by acidic hydrolysis of propionitrile. This is obtained by hydrogenation of acrylonitrile with following saponification to propionic acid. Palladium precipitated on calcium carbonate was used as a catalyst. Hydrogenation was carried out at a hydrogen pressure of 10 atm and continuous stirring of the mixture. The yield of propionitrile was 97% of the theoretical. For saponification the varied method of Beckurts and Otto [Ref 4] was used showing a yield of 95% propionic acid. There are 4 non-Soviet references.

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The Production of Propionic Acid From Acrylnitrile

SOV/80-32-5-50/52

ASSOCIATION: Institut organicheskoy khimii imeni N.D. Zelinskogo (Institute of Organic Chemistry imeni N.D. Zelinskiy)

SUBMITTED: January 16, 1958

Card 2/2



S/062/60/000/010/025/031/XX  
B002/B060

ORS: Novikov, S. S., Shvekhgeyer, G. A., and Dudinskaya, A. A.

TITLE: Condensation of Hexachloro Cyclopentadiene With Unsaturated Nitro Compounds

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 10, pp. 1858-1860

TEXT. Two types of nitro compounds may be used for the condensation of hexachloro cyclopentadiene with unsaturated nitro compounds: 1)  $\text{CH}_2=\text{CHR}$  (where R is, say,  $\text{NO}_2$  or  $\text{COOR}'-\text{NO}_2$ ), or 2)  $\text{NO}_2-\text{CH}=\text{CHR}$  (where R' may be hydrogen, alkyl, aryl, or  $\text{COOCH}_3\text{CN}$ ). For steric reasons, a condensation with unsaturated hydrocarbon compounds is scarcely possible. It is believed on the strength of studies of 1-nitro-propylene-1 (Ref. 4) that the reaction with monosubstituted unsaturated nitro compounds is likewise hardly possible, while it does take place - though slowly - with monosubstituted unsaturated nitro compounds. Experimental results have fully confirmed these theoretical

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Condensation of Hexachloro Cyclopentadiene With S<sup>0</sup>62/60/000/010/025/031/XX  
Unsaturated Nitro Compounds B002/B060

predations: 3-nitro-1,4,5,6,7,7-hexachloro bicyclo-[2,2,1] heptene-5 was synthesized in a good yield by 14 hours' heating a solution of nitro-ethylene and hexachloro cyclopentadiene in chloro benzene to 100-102°C. The condensation products of hexachloro cyclopentadiene with 2-nitro-ethyl ester of acrylic acid, 2,2-dinitro-propyl ester of acrylic acid, 2,2,2-trinitro-ethyl ester of acrylic acid, and 2,4,6-trinitro-phenyl ester of acrylic acid were synthesized in a similar manner. On the other hand, it was not possible to perform a reaction of hexachloro cyclopentadiene with  $\omega$ -nitro-styrene,  $\beta$ -nitro-acrylic acid methyl ester, 1-nitro-propylene-1, 2-nitro-propylene-1, or  $\beta$ -nitro-acrylic acid nitrile. A toxicological study conducted by N. M. Permyakova showed that all of the condensation products have an insecticidal effect. There are 4 non-Soviet references.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: May 15, 1959

Card 2/2

SHVEKHGEYMER, G.A.

Synthesis of dehydromorpholines from  $\beta$ -cyanoethyl esters of acetylenic alcohols. Izv. AN SSSR Otd. khim. nauk no.10:1870-1871 O '60.  
(MIRA 13:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo Akademii nauk SSSR.

(Morpholine)

NOVIKOV, S.S.; SHVETSKYMER, G.A.

New steps in the synthesis of  $\beta$ -halonitroalkanes. Izv. AN SSSR.  
Otd. khim. nauk no.11:2026-3021. '60. (MIRA 13:11)

1. Institut organicheskoy khimii im.N.D.Zelinskogo AN SSSR.  
(Paraffins)

5(3)

AUTHORS: Kovikov, J. S., Shvekhgheymer, G.A., 3/074/60/029/02/003/007  
Dudinskaya, A. A. B008/B001

TITLE: Nitro Compounds in Diene Synthesis

PERIODICAL: Uspekhi khimii, 1960, Vol 29, Nr 2, pp 187-219 (USSR)

ABSTRACT: This is a survey of the papers on diene synthesis with special attention to the problems of stereochemistry and the chemical properties of adducts obtained from unsaturated nitro compounds. Tables are enclosed which show all papers on diene synthesis of nitrodienes and nitrophylodienes published until 1959 inclusive. The mechanism of the reaction discovered by Diels and Alder is explained (Refs 12-25). The effect of the nitro group on the diene system was treated in the papers (Refs 21, 26-30). The presence of the nitro group, conjugated with the double bond, in phylodiene facilitates the diene synthesis. The following unsaturated nitro compounds were used as phylodienes in the reaction according to Diels-Alder: nitroethylene, its homologs and derivatives,  $\beta$ -nitro-styrene, its homologs and derivatives, and 1-1-dinitroethylene (Refs 1,4,7-9, 31-53). Adducts, which

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Nitro Compounds in Diene Synthesis

S/074/60/029/02/003/007

B008/B001

are formed on condensation of nitroolefins with dienes, contain one nitro group and one double bond. Thus, it is possible to obtain three different products on hydrogenation of the adduct: saturated nitro compound, saturated and unsaturated amines. Since the synthesis of these products is of importance in proving the configuration, methods for the selective hydrogenation of the adducts being formed are included in this paper. These methods are treated in references 2, 52-54. Ye.G. Katayev, and P. S. Matveyeva are mentioned. There are 3 tables and 56 references, 8 of which are Soviet. ✓

ASSOCIATION: Institut organicheskoy khimii AN SSSR im. N. D. Zelinskogo  
(Institute of Organic Chemistry AS USSR imeni N. D. Zelinskiy)

Card 2/2

BUDITSKIYA, A.L.; SHVETSHENKO, G.A.; POVIKOV, S.S.; SHVETSKIIY, V.I.

Influence of the configuration of the nitrophilodienes  $R-CH=CH-NO_2$   
on their condensation with cyclopentadiene. Izv. AN SSSR. Otd.  
Khim. nauk no. 1:182-184 Ja '61. (MIRA 14:2)

1. Institut organicheskoy Khimii im. M.D. Zelinskogo AN SSSR.  
(Cyclopentadiene)

NOVIKOV, S.S.; SHVEKHGEYMER, G.A.; PYATAKOV, N.F.

Interaction of  $\beta$ -nitro alcohols and ethoxyacetylene. *Izv. AN*  
SSSR. Otd. khim. nauk no.2:375-376 F '61. (MIRA 14:2)

1. Institut organicheskoy khimii im.N.D.Zelinskogo AN SSSR.  
(Alcohols) (Ether)



DUDINSKAYA, A.A.; SHVEKHGEYMER, G.A.; NOVIKOV, S.S.

Condensation of piperylene with nitro olefins. Izv. AN SSSR. Otd.  
khim. nauk no. 3:522-523 Mr '61. (MIRA 14:4)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.  
(Piperylene) (Olefins)

NOVIKOV, S.S.; SHVEKHGEYMER G.A.; DUDINSKAYA, A.A.

Condensation of cyclopentadiene with mono- and disubstituted nitro  
olefins. Izv.AN SSSR Otd.khim.nauk no.4:690-695 Ap '61.

(MIRA 14:4)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Cyclopentadiene) (Olefins)

NOVIKOV, S.S.; SHVEKHGEYMER, G.A.; PYATAKOV, N.F.

Addition of nitrile chloride to acrylic and methacrylic acids  
and their derivatives. Izv.AN SSSR.Otd.khim.nauk no.5:914-915  
My '61. (MIRA 14:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Nitriles) (Acrylic acid) (Methacrylic acid)

DUDINSKAYA, A.A.; NOVIKOV, S.S.; SHVEKHGEYMER, G.A.

Structural orientation of the diene condensation of trans-  
piperylene with some nitrodienophiles. Izv. AN SSSR, Ser.  
khim. no.11:2024-2029 '65. (MIRA 18:11)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

ACC NR: AP6033164

SOURCE CODE: UR/0079/66/036/010/1852/1856

AUTHOR: Shvokhgoymer, G. A.; Kryachkova, A. P.

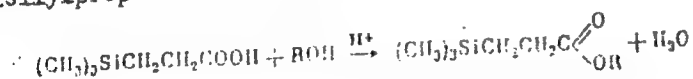
ORG: Moscow Institute of the Petrochemical and Gas Industry (Imeni I. M. Gubkin (Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti))

TITLE: Preparation of esters of  $\beta$ -trimethylsilylpropionic acid

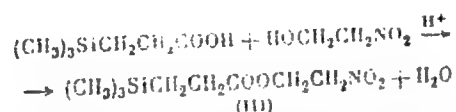
SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1852-1856

TOPIC TAGS: organosilicon compound, esterification, *ester*

ABSTRACT: The esterification of  $\beta$ -trimethylsilylpropionic acid with unsaturated alcohols, nitro alcohols and epichlorohydrin, and the transacetylation of vinyl acetate with  $\beta$ -trimethylsilylpropionic acid were investigated. The reactions were:



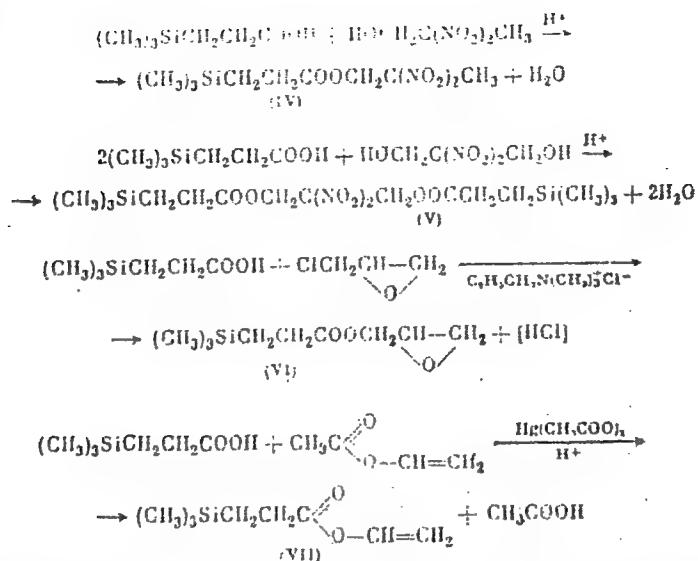
(I) R = CH<sub>2</sub>=CH-CH<sub>2</sub>, (II) R = HC=C-CH<sub>2</sub>



UDC: 546.287

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ACC NR: AP0033184



It was found that allyl and propargyl alcohol readily esterify  $\beta$ -trimethylsilylpropionic acid in the presence of KU-2 ion exchange resin, and that alcohols having nitro groups in position 2 relative to the hydroxyl (2-nitroethyl and 2,2-dinitropropyl al-

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ACC NR: AP0033184

cohol) react with more difficulty with this acid. The physical constants are as follows: (I) -  $d_4^{20}$  0.9127,  $n_D^{20}$  1.4311; (II) - BP 103° (1 mm),  $d_4^{20}$  0.9195,  $n_D^{20}$  1.4378; (III) - BP 96-97° (2 mm),  $d_4^{20}$  1.0352,  $n_D^{20}$  1.4466; (IV) - BP 108-109° (1 mm),  $d_4^{20}$  1.1258,  $n_D^{20}$  1.4524; (V) - BP 33-34°; (VI) - BP 105-106° (2 mm),  $d_4^{20}$  1.0694,  $n_D^{20}$  1.4593; (VII) - BP 57° (9 mm),  $d_4^{20}$  0.8970,  $n_D^{20}$  1.4289.

SUB CODE: 07/ SUBM DATE: 06Aug/65/ ORIG REF: 002/ OTH REF: 004

Card 3/3

192

AUTHOR: Shyekhman, M.N., Ingenieur.

TITLE: Determination of the cross-sectional area of concrete and reinforced concrete elements under axial compression taking into account longitudinal bending. (Prakticheskii podbor sechenii tsentral'no szhatykh betonnykh i zhelezobetonnykh elementov s uchedom prodol'nogo izgiba).

PERIODICAL: "Beton i Zhelezobeton" (Concrete and Reinforced Concrete), 1957, No.2, pp.75-76 (U.S.S.R.)

ABSTRACT: The above calculations are based on the following formulae:

$$N \leq N_{perm} = m\phi R_{pris} F$$

and

$$N \leq N_{perm} = m\phi/R_{pris} F + (m_a R_a - R_{pris}) F_a /$$

where  $N$  = the calculated centrally positioned longitudinal force;

$N_{perm}$  = the permissible centrally positioned longitudinal force;

$m$  = the coefficient of operation conditions of the element;

$\phi$  = the coefficient of longitudinal bending;

$R_{pris}$  = the prismatic strength of the concrete;

$F$  = the cross-sectional area of the element;

$m_a$  and  $R_a$  = the coefficient of the working conditions and the calculated resistance of the reinforcement;



AUTHOR: Shvekhman, M.N., Engineer. SOV/97/58/2/15/16

TITLE: Calculation of sizes of Eccentrically Loaded Rectangular Reinforced Concrete Foundation Slabs (Opredeleniye razmerov podshvy vnetsentrenno nagruzhennykh pryamo-ugol'nykh zhelezobetonnykh fundamentov).

PERIODICAL: Beton i Zhelezobeton, 1958, Nr 2, pp 78-80.

ABSTRACT: Theoretical calculations and formulae are given for the calculation of the above-mentioned foundations. Explanation is given together with a definition of various values. An example of practical use is illustrated. A table gives values for calculations of eccentrically loaded foundations. There is one illustration and one Table.

1. Structures--Design 2 Structures--Theory 3. Reinforced concrete  
--Applications 4. Mathematics--Applications

Card 1/1

TSINTSADZE, G.V.; SHVELASHVILI, A.E.

Crystallochemistry of cadmium in Georgian sphalerites. Soob.AN  
Gruz.SSR 25 no.1:33-35 J1 '60. (MIRA 13:10)

1. Akademiya nauk Gruzinskoy SSR, Geologicheskii institut,  
Tbilisi. Predstavleno akademikom G.S.Dzotsenidze.  
(Cadmium) (Georgia—Sphalerite)

SHVELASHVILI, G.G.; PORAY-KOSHITS, M.A.; ANTSYSHKINA, A.S.

Octahedral structure of diacyldiethylenediamminonickel  
of  $\text{Ni}(\text{NO}_2)_2\text{NCSCl}$  and  $\text{Ni}(\text{NO}_2)_2\text{NCSBr}$ . Zhur. strukt. khim. 6 no.  
173 Ja-F '65.

Two modifications of diacyldiethylenediamminonickel of  
 $\text{Ni}(\text{NO}_2)_2\text{NCS}$ . Ibid.:168-170

1. Institut obshchey i neorganicheskoy khimii imeni N.D.  
Kurnakova AN SSSR. Submitted October 2, 1964.

.. .. .

Study of the  $\gamma$ -absorption spectra of nickel in dihalogeno-  
diamine compounds as a preliminary step in solving crystal  
structures of these compounds. Zhur. strukt. khim. 5 no.3:  
40-50 (1960) (Russian) (MIRA 1:1)

1. Institut khimicheskoi fiziki, gos. univ. i khimicheskii ped. inst.  
Moskva.

SUMELASHVILI, A. Ye., PORAI-KUSHITS, E.A.; ANTOSHELKA, A.S.

Dimeric structure of nickel thio cyanodiodoethyldiamine.  
Zhur. strukt. khim. 5 no.5:787-798 S-O '64 (MIRA 18:1)

I. Institut khimicheskoy i neorganicheskoy khimii imeni N.S.  
Kurnakova, AN SSSR.

BLINOV, V.A., nauchnyy sotrudnik, kand.tekhn.nauk; RUMYANTSEVA, L.F.  
nauchnyy sotrudnik; ANISHCHUK, Ye.N., nauchnyy sotrudnik; SHVELEVA,  
L.S., inzh.; GORBACHENKOVA, A.V., inzh.

Emulsion dyeing of cotton and blended cotton-lavsan goods with  
the leuco esters of vat dyes. Tekst.prom. 25 no.2:65-67 F '65.

(MIRA 18:4)

1 Nauchno-issledovatel'skiy institut organicheskikh poluproduktov  
i krasiteley (for Blinov, Rumyantseva, Anishchuk). 2. Kombinat  
"Trekhgornaya manufaktura" imeni Dzerzhinskogo (for Shmeleva,  
Gorbachenkova).

\_\_\_\_\_

### Vitamin Therapy.

Treatment of psoriasis with vitamin D<sub>2</sub>. Vest. ven. i dorm. No. 3 1952.

Monthly List of Russian Accessions. Library of Congress, October 1952. UNCLASSIFIED.

CONCLUSION, ...

"The ... of ... with  
Vitamin ..."

estrogen, estradiol, estrone, estradiol (Bulletin of Venerology Dermatology),  
1961, Volume 1, Part 1, 1961, Moscow.



Dr. V. A. Lashin, Moscow, U.S.S.R., 1970.

"The Influence of Vitamin B<sub>2</sub> on the Total Protein in Association with  
Chronic Tuberculosis."

Vechnik meditsinskoi i biologicheskoi (Bulletin of Venerology Dermatology),  
1, January-February 1971 (Winter), Moscow.

SHVELIDZE, I.Kh., professor

Use of thibone in the treatment of scrofuloderma and tuberculous lymphadenitis [with summary in French]. Probl.tub. 35 no.1:45-47  
' 57. (MIRA 10:6)

1. Iz kozhnogo otdeleniya (zav. - prof. I.Kh.Shvelidze) Instituta tuberkuleza Gruzinskoy SSR (dir. - prof. G.Z.Inasaridze)

(SCROFULA, ther.

TB<sub>1</sub> in scrofuloderma (Rus))

(TUBERCULOSIS, LYMPH NODE, ther.

TB<sub>1</sub> (Rus))

(THIOSEMICARBAZONES, ther. use

TB<sub>1</sub> in lymph node tuberc. & scrofuloderma (Rus))

ZHGENTI, V.K.; akademik; SHVELIDZE, I.Kh.; SHARASHIDZE, L.K.

Structural changes in the skin and its nervous apparatus during the treatment of lupus tuberculosis with phthivazid. Soob. AN Gruz. SSR 24 no.6:755-759 Je '60. (MIRA 13:9)

1. AN GruzSSR (for Zhgenti). 2. Respublikanskiy nauchno-issledovatel'-skiy tuberkuleznyy institut, Tbilisi.  
(SKIN) (LUPUS) (ISONICOTINIC ACID)

SHVELIDZE, K.M.

Competing for a high title. Avtom., telem. i sviaz' 9 no.3:35  
Mr '65. (MIRA 18:11)

1. Zamestitel' nachal'nika Khashurskoy distantzii Zakavkazskoy  
dorogi.

SHVELIDZE, K.M.

Efficiency experts of the Khashuri section. Avtom., telem.i sviaz'  
4 no.3:27 Mr '60. (MIRA 13:7)

1. Zamestitel' nachal'nika Khashurskoy distantsii signalizatsii  
i svyazi Zakavkazskoy dorogi.  
(Georgia--Railroads)  
(Founding)  
(Electric welding)

SHVELIDZE, K.M.

They were awarded an illustrious title. Avtom., telem. i svaiz' 5  
no.5:19 My '61. (MIRA 14:6)

1. Zamestitel' nachal'nika Khashurskoy distantzii signalizatsii i  
svyazi Zakavkazskoy dorogi.

(Railroads—Employees)

(Railroads—Signaling)

SHVELIDZE, K.M.

Results of the review of work of the efficiency promoters. Avtom.  
telem.i sviaz: 5 no.7:43 J1 '61. (MIRA 14,10)

1. Zamestitel: nachal'nika Khashurskoy distantzii signalizatsii i  
svyazi Zakavkazskoy dorogi.  
(Railroads--Signaling)

SHVELIDZE, I.M.

In a friendly and cooperative manner. Avtom., telem. i sviaz' :6  
no.3:33 Mr '62. (MIRA 15:3)

1. Zamestitel' nachal'nika khashurskoy distantzii signalizatsii i  
svyazi Zakavkazskoy dorogi.  
(Railroads--Employees)



SHVELIDZE, T.I.

Modification of the leucocytes of a healthy subject in tissue cultures.  
Sobh. AN Gruz. SSR 29 no.5:633-639 N '62. (MIRA 28:3)

1. Nauchno-isledovatel'skiy institut pereivaniya krovi im.  
akademika G.M.Mukhadze, Tbilisi. Submitted October 15, 1961.

SHVELIDZE, T.I.

Effect of plasma and bone marrow extract from leukemia patients on tissue cultures of leucocytes from healthy people. Soob. AN Gruz. SSR 30 no.4:509-516 Ap '63. (MIRA 17:9)

1. Nauchno-issledovatel'skiy institut perelivaniya krovi imeni akademika G.M. Mukhadze Ministerstva zdravookhraneniya Gruzinskoy SSR. Predstavleno akademikom K.D. Eristavi.

SHVELIDZE, T.V.

Establishing optimum exploitation conditions for hydroelectric power station reservoirs with an allowance for losses of water through filtration and evaporation. Soob. AN Gruz. SSR 19 no.6: 709-716 D '57. (MIRA 11:6)

1. Institut energetiki im. A.I. Didebulidze AN GruzSSR, Tbilisi.  
Predstavleno akademikom R.I. Agladze.  
(Hydroelectric power stations)

SHVELIDZE, T.V.

Establishing the optimum exploitation level of water in the  
filtrating reservoir of a hydroelectric power station operated  
within a power system. Soob. AN Gruz. SSR 20 no. 3:273-276 Mr '58.  
(MIRA 11:7)

1. AN GruzSSR, Institut energetiki im. A.Didebulidze, Tbilisi.  
Predstavleno akademikom K.S.Zavriyevym.  
(Hydroelectric power stations)

SHVELIDZE, T. V., Candidate Tech Sci (diss) -- "Investigation of the operating conditions of the reservoir of a hydroelectric power station, taking account of filtration losses". Moscow, 1959. 20 pp (Min Higher Educ USSR, Moscow Order of Lenin Power Engineering Inst), 150 copies (KL, No 24, 1959, 143)

SIVELIDZE, T.V.; BARKHULAROVA, I.S.

Coefficient of flow fluctuation for large rivers in the Georgian  
S.S.R. and the Northern Caucasus and its change in dependence on  
the calculated outflow. Trudy Inst.energ.AN Gruz.SSR 16:13-30  
'62. (MIRA 16:4)

(Georgia--Rivers) (Caucasus, Northern--Rivers)

BRESLER, V.M.; BROUN, R.G.; PODGAYETSKAYA, D.Ya.; SHVEMBERGER, I.N.

Leucosogenic effect of nucleic acids isolated from tumors.  
TSitologiya 4 no.3:318-322 My-Je '62. (MIRA 16:3)

1. Laboratoriya tsitologii zlokachestvennogo rosta Instituta  
tsitologii AN SSSR, Leningrad i Laboratoriya khimii belka  
Leningradskogo universiteta.  
(LEUKEMIA) (NUCLEIC ACIDS)

SHVACHENKO, I.N.

Study of the cancerogenic action of N-nitrosodimethylamine and N-nitrosodiethylamine. Report No.1: Early histological changes in the rat liver under the action of N-nitrosodimethylamine and N-nitrosodiethylamine. Stor. rab. Inst. tsit. no.7:76-85 '63.

Study of the cancerogenic action of N-nitrosodimethylamine and N-nitrosodiethylamine. Report No.2: Primary liver and kidney tumors produced in rats under the action of N-nitrosodiethylamine. Ibid.:86-91 (MIRA 17:6)



FEL', V.Ya.; TSIKARISHVILI, T.N.; SHVEMBERGER, I.N.

Antigenic characteristics of hepatomas produced in rats with  
N-nitrosodiethylamine. Vop. onk. 10 no.9:66-69 '64.

(MIRA 18:4)

1. Iz laboratorii tsitologii zlokachestvennogo rosta (zav. -  
prof. Yu.M.Olenov) Instituta tsitologii AN SSSR (dir. - chlen-  
korrespondent AN SSSR A.S.Troshin). Adres avtorov: Leningrad,  
F-121, prospekt Maklina, 32, Institut tsitologii AN SSSR.

VAKHTIN, Yu.B.; IGNATOVA, T.N.; FRIDLYANSKAYA, I.I.; SHVENBERGER, I.N.

Intensity of selection and the frequency of sharp karyotypic variations  
in the populations of somatic cells during clonal multiplication.

TSitologiya 7 no.2:258-259 Mr-Apr '65. (MIRA 18:7)

1. Laboratoriya tsitologii zlokechestvennogo rosta Instituta  
tsitologii AN SSSR, Leningrad.



SHIMIZU, K., I.D.

Induction of malignant tumors of the esophagus and stomach in the  
strain C3HA mice with N-nitrosodimethylamine. Var. 207. 11 no. 8:74-  
77 '66. (MIRA 18:8)

1. In laboratory test. 1961. 21 no. 1:100-101. - prof.  
Dr. V. G. Gerasimov) Institut d'Oncohematologie de l'URSS (dir. - acad.-correspondent  
de l'URSS A. S. Froshin).

Author: V. I. KRYUKOV, Leningrad. Title: *POKRYTIYA V. I. N. OIFROV, Yu. M.*

Superantigens in the hepatocellular tumors in rats. TS tologile  
"vol. 182-641 May '91. (MIRA 18:9)

2. Laboratoriya genetiki opukhlevykh klistok Instituta tsitologii  
AN SSSR, Leningrad.

SHVEMBERGER, I.N.; VAKHTIN, Yu.B. (Leningrad)

Histological analysis of rat rhabdomyosarcomas produced by implantation of cells after their malignant degeneration in vitro. Arkh. pat. 27 no.8:49-55 '65. (MIRA 18:10)

1. laboratoriya tsitologii zlokachestvennogo rosta (zav. - prof. Yu.M.Olenov) Instituta tsitologii (dir. - chlen-korrespondent AN SSSR A.S.Troshin) AN SSSR.

SEV: Mh: 2000, 1.00.

Mitogenesis of anaplastic tumors induced in rats by nitro-  
amine. TS biologiya 7 no. 3: 305-311. Moscow, 1966. (MIRA 18:10)

L. Laboratory of general cytology, Institute of Cytology  
AN USSR, Leningrad.

YAKHTIN, Yu.B.; IGNATOVA, T.N.; FRIDEL'ANSKAYA, I.I.; SHVEMBERGER, I.N.

Changes in tumor cell populations caused by cloning. TSitologiya  
7 no.3:393-400 My-Je '65. (MIRA 18:10)

1. Laboratoriya genetiki opukholevykh kletok Instituta tsitologii  
AN SSSR, Leningrad.



PEL', V.Ya.; SHVEMBERGER, I.N.; IVANOV, V.A.

Study of the specific antigens of hepatomas induced in rats  
by N-nitrosodiethylamine. Tsitologiya 7 no.3:416-420 Vy-Je '65.  
(MIRA 18:10)

1. Laboratoriya genetiki opukholevykh kletok Instituta  
tsitologii AN SSSR, Leningrad.

SHVELIDZE, T.V.; MDIVANI, J.S.

Synchronization of the annual runoff of large rivers of Northern  
Caucasus and Egypt and correlative relationship between the  
rivers. Trudy Inst. energ. AN Gruz. S.R. 17: 31-38 '63.  
(MIRA 17:7)

1947-1948, M. A.

Mem., Central Sci. Res. Inst., Kazakhstan Petroleum Trust, -1946-47-. "Disthene-Stauroilite Association of Minerals in the Mesozoic of the South-Emba Oil-Bearing Region," Dokl. AN, 52, No. 6, 1946; "Petrographic Correlation and Mineralogical Association of the Upper Permian and Mesozoic Deposits of the Southern Emba Petroleum Bearing Regions," ibid., 52, No. 6, 1946; "Aspects of Prospecting for Gas and Oil Deposits between the Ural and Volga Rivers," Razvedka Nedr, No. 6, 1947.

USSR/Geol Prospecting  
Petroleum

Nov/Dec 1947

"Aspects of Prospecting for Gas and Oil Deposits Between the Ural and Volga Rivers," N. A. Shvemberger, S. K. Karymsakov, 3 pp

"Razvedka Nedr" No 6

Lowland area along the Caspian Sea between the Ural and Volga Rivers, characterized by many hydrocarbon gas discharges, differs considerably in its geological structure from neighboring Baba oil fields. Due to recent prospecting, area is looked upon as new oil- and gas-bearing region almost untouched by geological study.

LC

57T40

USSR/Geology

Petrology

Minerals

Dec 1947

PA 60729  
"Petrographic Correlation and Mineralogical Association of the Upper Permian and Mesozoic Deposits of the Southern Dnieper Petroleum Bearing Regions," N. A. Shvenberger, Cent Sci Res Lab, 'KazakhstanNeft', 4 pp

"Dokl Akad Nauk SSSR, Nova Ser" Vol LVIII, No 7

Data obtained as result of mechanical and mineralogical analysis at Central Scientific and Research Laboratory from 1937 to 1946, permitted establishment of petrographic correlation systems for subject deposits. Data

60729

USSR/Geology (Contd)

Dec 1947

presented in tabular form. Submitted by Academician I. I. Shmal'gauzen, 10 Jul 1947.

SHVENBERGER, N. A.

60729

SHVETENBERG, N. A.

USSR/Geology  
Tectonics

Mar/Apr 1948

"Some Regularities in the Distribution of Salt Domes in the South Emba Region," N. A. Kosygin, N. A. Shvemberger, Yu. P. Nokitina, 4 pp

"Byul' i osk Obsh' Esty Prirod, Otdel Geolog" Vol XXIII, No 2

Authors, taking as examples the distribution of domes in the periphery of the Baychunaesskiy depression, show that the localization and orientation of salt domes in the western Transkazakhstan is closely connected to the formation of the contemporary depressions in the Pre-Caspian syncline.

PA 66T57

SHVEMBERGER, N.A.

Prospects for finding oil and gas in Mesozoic and Cenozoic sediments in the northern part of the Kuban-Azov Lowland. Geol.-nefti i gaza 6 no.5:17-20 My '62. (MIRA 15:5)

1. Novocherkasskiy politekhnicheskiy institut.  
(Kuban-Azov Lowland--Petroleum geology)  
(Kuban-Azov Lowland--Gas, Natural--Geology)

SHVENBERGER, N.A.

Tectonics and basic stages in the development of the Kuban-Azov  
trough. Biul.MOIP.Otd.geol. 37 no.2:34-47 Mr-Ap '62. (MIRA 15:7)

(Kuban-Azov Lowland--Geology, Structural)



SHVEMBERGER, N.A.

Upper Cretaceous stratigraphy and paleogeography of the Kuban-Azov  
Lowland. Izv.vys.ucheb.zav.; geol.i razv. 6 no.3:30-35 Mr '63.  
(MIRA 16:5)

1. Novocherkasskiy politekhnicheskiy institut.  
(Kuban-Azov Lowland--Geology, Stratigraphic)  
(Kuban-Azov Lowland--Paleogeography)

SHVEMBERGER, Yu.N.

Stratigraphic succession of flysch sediments in the Danian stage and Paleocene of the Novorossiysk region, based on foraminifera. Izv. vys. ucheb. zav.; geol. i razv. 2 no.2:72-75 F '59.

(MIRA 12:10)

1. Novocherkasskiy politekhnicheskiy institut.  
(Novorossiysk region--Flysch)  
(Foraminifera, Fossil)

BURSH'AR, M.S.; SHVENBERGER, Yu.N.

Paleocene deposits of the Kuma region of eastern Ciscaucasia.  
Dokl.AN SSSR 145 no.3:625-627 JI '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy  
neftyanoy institut. Predstavleno akademikom A.L.Yanshinya.  
(Kuma Vallay--Geology, Stratigraphic)

AFANASYEV, S.I.; ANDREYEVA, M.V.; SHVENGERGER, Yu.N.

Flysh sediments of the Danian series and Lower Paleogene of  
the southern slope in the western Caucasus. Trudy VNIIGM.  
no.34:193-213 '61. (MIRA 15:7)  
(Caucasus---Flysh)

BURSHAR, M.S.; NIKITIN, Y.I.; SOLOVYOV, R. Yu.N.

Stratigraphy and conditions governing the formation of the  
Upper Eocene and Maikop sediments of Stavropol Territory and  
the Sal-Manyon interfluvium. Trudy VNIGI no.38:89-104 '63.

[MIRA 17:6)

NIKITINA, Yu.P.; SHVEMBERGER, Yu.N.

Paleocene of the Kuban-Azov Lowland, the Karpinsk swell, and  
the southern slope of the Veronezh antecline. Trudy VNIGNI no.  
38:105 147 '63. (MIRA 17:6)

KALINENKO, V.V.; SHVEMBERGER, Yu.N.

Maikopian structure and age of manganese-bearing sediments of the Laba and Belaya interfluvium (northwestern Caucasus). Dokl. AN SSSR 150 no.4:878-881 Je '63. (MIRA 16:6)

1. Geologicheskii institut AN SSSR i Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut. Predstavleno akademikom N.M. Strakhovym.  
(Belaya Valley—Geology, Stratigraphic)  
(Laba Valley—Geology, Stratigraphic)

NIRIYINA, Y.L.P., SHVEMBERGER, Iu.N.

Analogues of the Palogene Kubertin and Keresstin horizons in the  
Northern Caucasus. Biol. MOP. Otd. geol. 40 no. 5:69-74  
My-Je '65. (MIRA 18:8)



SHVENTSIKOV, N. T.  
SHVENTSIKOV, N. T.

"Metalwork and Welding Contrivances used in Aircraft Construction," National  
Publishing House of the Defense Industry, Moscow, 1949.

SHVET, E.

USSR / Cultivated Plants. Plants for Technical Use. M  
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34726

Authors : Shvet, E.; Vasil'iev, N.; Kuznetsova, N.  
Inst : Sc. Institute for Farm Research of the Union.  
Title : Injury to Cotton Plants by the Food Killer Pre-  
paration 2,4 D.

Orig Pub : Khlopkovodstvo, 1957, No 6, 58-59

Abstract : Observations by the Central Station for Plant  
Protection of the Scientific Confederate Res-  
earch Institute for Farming have shown that  
sprinkling of the cotton plant with dilutions  
of the preparation 2,4 D in doses of 100 and  
500 g/h during the phase of fruit formation led  
to the burning of leaves and young shoots. After  
20 days, the shrubs of these cotton plants were

Card 1/2

80

SHVER, E. S.

USSR/Chemistry - Kinetics of Combustion Jul 53

"Kinetics and Mechanism of the Decomposition of Propane in the Presence of Isobutylene and Propylene Acting as Inhibitors," A. D. Stepukhovich and E. S. Shver, Saratov State Univ

Zhur Fiz Khim, Vol 27, No 7, pp 1013-1033

Studied the effect of added isobutylene (I) or propylene (II) on the kinetics of the decomposition of propane. I has a greater inhibiting effect than II. As the temp is increased, the relative inhibiting action of the additives is decreased. Proposes a

27LT13

mechanism for the action of I explaining the possibility of I combining with  $CH_3$  radicals. The inhibiting effect is produced by conversion of active  $CH_3$  radicals into inactive allyl or isobutenyl radicals. Calculations indicate that the activation energy of the inhibiting reaction can be much lower than the energy of bonds which are broken when the decomposition advances. Hence the reactivity of mols having stable bonds is entirely different in the presence of radicals.

27LT13

SHWER, E.S.

635. Kinetics and mechanism of decomposition of propane in presence of added organic molecules. A. D. Stepanovich and E. S. Shver. Dokl. Akad. Nauk S.S.S.R., 1953, 89, 1087-90. A study on cracking of propane at 620° C and 10 mm under static conditions with addition of propylene and isobutylenes. Saturation of retarding effect reached at 12% isobutylenes, propylene half as effective. Greater retarding activity of isobutylene due to presence of  $2^{\circ}$  H<sub>2</sub> groups, whereas H can be broken off, with resultant formation of inactive radical.

2/

400

mm

SIVER, K. V.

27  
3  
1-4E2C  
Decomposition of oxysulfide slag in the production of  
corundum abrasives. M. V. Shver. U.S.S.R. 106,147,  
July 25, 1957. The decomposition is carried out by vigorously  
stirring the slag in an alk. medium at 60-120°. The proc-  
ess is carried out in a lined autoclave with simultaneous oxi-  
dation of the sulfides with air or O under 6-12 atm.

M. Hosh...

gaf

5 (8) PHASE I BOOK EXPLOITATION 80V/2269

Glavaya geofizicheskaya observatoriya  
Voprosy klimatologii (Problems of Climatology) Leningrad, Glavmeteoizdat,  
1958. 134 p. (Series: 1st; 2nd, 3rd, 4th, 5th) Extra slip inserted.  
1,100 copies printed.

Sponsoring Agency: Glavmeteoizdat  
pri Sverdlovskom gos. univ.  
pri Sverdlovskom gos. univ.

Ed. (title page): V.V. Orlov, Candidate of Geographical Sciences; Ed.  
(inside book): L.F. Zhidomov; Tech. Ed.: A.A. Serpyev.

PURPOSE: This issue of the Observatory's Transactions is intended for meteorologists, climatologists and soil scientists.

COVERAGE: The authors discuss the impact of climate and precipitation upon soil conditions and crop cultivation. Articles on the snow cover in Western Europe and the problem of correlating data obtained from precipitation gauges and rain gauges are presented here as part of the International Geophysical Year program. The article by L.A. Golitsberg suggests a method of compiling data on probable occurrence of certain meteorological phenomena. There are numerous graphs, maps and tables. References accompany each article.

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9-11-59

4

SHVER, TS.A.

Ratio between total monthly amounts of precipitation obtained from  
Tret'iakov's precipitation gauge and the rain gauge. Trudy GGO no.85:  
131-135 '58. (MIRA 12:5)

(Precipitation (Meteorology)--Measurement)

SHVER, TC. A.

Reducing the amount of precipitation measured by the rain  
gauge to the readings of the precipitation gauge. Trudy GGO  
no.113:85-90 '60. (MIRA 14:3)  
(Precipitation(Meteorology)—Measurement)



SHVER, TS.A.

Comparing the amounts of precipitation measured with the  
precipitation gauge and by the method of snow gauging surveys.  
Trudy GGO no.122:61-67 '61. (MIRA 14:8)  
(Precipitation (Meteorology)—Measurement)

SHVER, TS.A.

Comparing the amount of winter precipitation, as recorded by precipitation meters and rain gauges, with the maximum water resources according to snow surveys. Trudy GGO no.131:29-36  
'62. (MIRA 15:6)

(Precipitation (Meteorology)---Measurement)

SHVER, TS.A.

Quantitative recurrence of various kinds of precipitation. Trudy  
GGO no.131:37-44 '62. (MIRA 15:6)  
(Precipitation (Meteorology)--Measurement)

KHAZENSON, L.B.; FRIDMAN, E.A.; VITEL'S, L.A.; SHVER, TS.A.

Influence of meteorological factors on the incidence of influenza and acute catarrh of the respiratory tracts. Trudy Len.inst. epid.i mikrobiol. 22:166-173 '61. (MIRA 16:2)

1. Iz laboratorii grippa (zav. E.A. Fridman) i sektora epidemiologii (zav. I.M. Ansheles [deceased]) Leningradskogo instituta epidemiologii i mikrobiologii imeni Pastera i otdela klimatologii Glavnoy geofizicheskoy observatorii (zav. V.P. Pastukh).  
(~~LENINGRAD~~—INFLUENZA) (~~LENINGRAD~~—CATARRH)  
(~~LENINGRAD~~—WEATHER—MENTAL AND PHYSIOLOGICAL EFFECTS)

ACCESSION NR: AT4002662

S/2531/63/000/149/0072/0080

AUTHOR: Shver, Ts. A.; Ivleva, G. F.

TITLE: Length of the period of solid and mixed precipitation of USSR territory

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy\*, no. 149, 1963.  
Voprosy\* prikladnoy klimatologii, 72-80

TOPIC TAGS: climatology, USSR climatology, solid precipitation, mixed precipitation, USSR precipitation period, precipitation duration, meteorology, precipitation physico-geographic relationship

ABSTRACT: One of the important problems of climatology is the calculation of perennial average values of different meteorological elements. These averages are used for comparison of climatic conditions of different regions and at the same time are used for the development of different climatic behavior of each season in varied geographical conditions. To measure these perennial averages the authors have employed Tret'yakov's precipitation gauge. The use of Tret'yakov's precipitation gauge in place of a rain gauge with a Nifyer screen resulted in more accurate measurement of the hard precipitation level. This measurement necessitated a reevaluation of the long term averages of the precipitation levels. For the sake of uniformity, any month having no more than 5 days

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with average daily temperatures above 0C was regarded as a part of the hard precipitation period. This definition allows one to determine the duration of the hard precipitation period to within a ten-day interval. The beginning of the hard precipitation period varies from the third 10-day period in September in the North to the second 10-day period in January in the Southwest. The end of this period varies from the second 10-day period of June to the second 10-day period of February. The duration varies over the territory of the USSR and is longest (twenty-eight 10-day intervals) in the northern Taymyr Peninsula and shortest (four to six 10-day intervals) in the southern part of the European territory. The territory of the SSSR is divided into 44 regions, each of which measures 5 degrees in latitude and 10 degrees in longitude as shown in Figure 1 of the Enclosure. For identical wind velocities and type of screening the corrections applied to the average hard precipitation level as measured with the gauge depend upon the physical and geographical conditions of the region. The correction for the mixed precipitation level is constant and is equal to 10%. The duration of the mixed period varies from one 10-day period in the North and Northeast to six to seven 10-day periods in the western and southern portions of the European territory. It is concluded that the average monthly temperature of the hard precipitation period ranges from -6.0 to -7.5C at the beginning and at the end from -5.0 to -7.2C over most of the USSR, with the exception of the northern and north-eastern regions. Orig. art. has: 2 figures and 4 tables.

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ASSOCIATION: Glavnaya Geofizicheskaya observatoriya, Leningrad (Main Geophysical Observatory)

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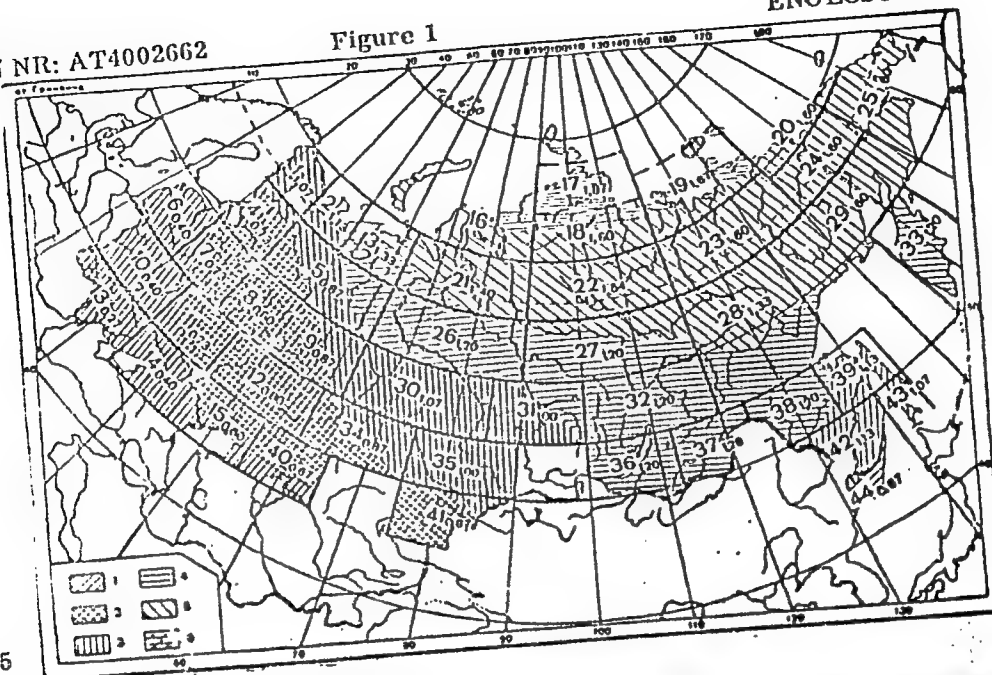
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Figure 1

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(Continued - Fig. 1)

Fig. 1 - Schematic chart of regions (large numerals) and ratios of the duration of the cold period (November to March) to the duration of the hard precipitation period (small numerals). Duration of the period with hard precipitation: 1 - XII<sub>3</sub> - II<sub>2-3</sub>, 2 - XI<sub>3</sub> - XII<sub>2</sub> - III<sub>1-3</sub>, 3 - X<sub>1</sub> - 2 - III<sub>3</sub> - IV<sub>2</sub>, 4 - X<sub>2-3</sub> - IV<sub>2</sub>, 5 - X<sub>1-2</sub> - IV<sub>3</sub> - V<sub>3</sub>, 6 - X<sub>2-3</sub> - VI<sub>1-2</sub>.

(Roman numerals denote the month, subscripts denote number of 10-day intervals from the first day of each month).

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BOOK EXPLOITATION

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Shver, Tsilya Abramovna

A study of the results of rain-gauge and precipitation-gauge observations (Issledovaniye rezul'tatov nablyudeniya po dozhdemernu i osadkomernu) Leningrad, Gidrometeoizdat, 1965. 169 p., illus., biblio., append. Errata slip inserted. 900 copies printed. (At head of title: Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR. Glavnaya geofizicheskaya observatoriya im. A. I. Voyeykova). Editor: L. I. Shtannikova; Technical editor: G. V. Ivkova; Proofreaders: Z. A. Belkina, K. I. Rozinova

TOPIC TAGS: atmospheric precipitation, Nipher shield, precipitation gauge, rain gauge, snow gauge, Tretyakov shield

PURPOSE AND COVERAGE: This book was intended for a wide circle of specialists, including meteorologists and hydrologists, working on both practical and design problems. Problems connected with replacing a rain gauge having a Nipher shield with a precipitation gauge having a planar shield of the Tretyakov system are discussed. Conversion factors are derived for solid precipitates at meteorological stations, depending on the wind velocity and the type of shielding installation.

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tion on the instrument, by special classifications.

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